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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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**Built-in 32.768 kHz-DTCXO, High Stability
I²C-Bus INTERFACE REAL TIME CLOCK MODULE**

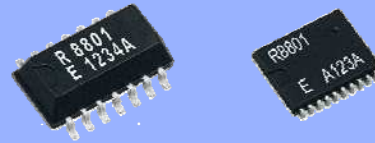
RX - 8801 SA / JE

- Built in frequency adjusted 32.768 kHz crystal unit and DTCXO.
- Interface Type : I²C-Bus Interface (400 kHz)
- Interface voltage range : 1.6 V to 5.5 V
- Temp.compensated voltage range: 2.2 V to 5.5 V
- Wide Timekeeper voltage range : 1.6 V to 5.5 V
- 32.768 kHz frequency output function : C-MOS output With Control Pin
- The various functions include full calendar, alarm, timer.

* The I²C-Bus is a trademark of NXP Semiconductors



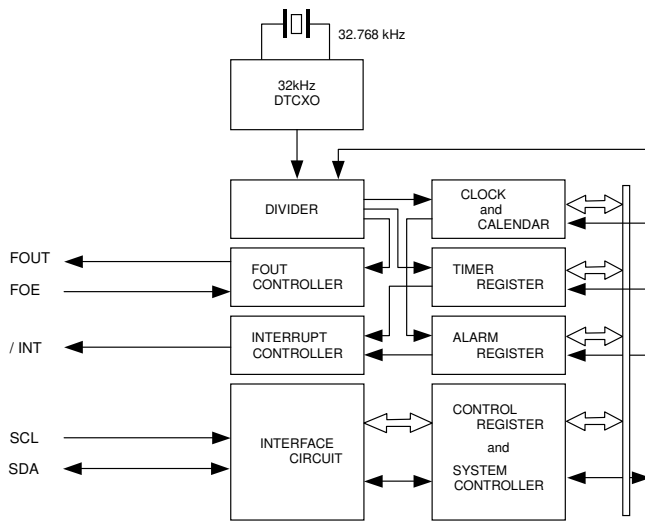
Product Number (Please contact us)
RX-8801SA : X1B000011xxxx00
RX-8801JE : X1B000031xxxx00



Actual size



Block diagram



Overview

- High Stability
 - UA
 - ± 1.9 × 10⁻⁶ / 0 °C to +40 °C
(Equivalent to 5 seconds of month deviation)
 - ± 3.4 × 10⁻⁶ / -40 °C to +85 °C
(Equivalent to 9 seconds of month deviation)
 - UB
 - ± 3.8 × 10⁻⁶ / 0 °C to +50 °C
(Equivalent to 10 seconds of month deviation)
 - ± 5.0 × 10⁻⁶ / -40 °C to +85 °C
(Equivalent to 13 seconds of month deviation)
- 32.768 kHz frequency output function
 - FOUT pin output (C-MOS output), CL=30 pF
 - Output selectable
< 32.768 kHz, 1024 Hz, 1 Hz >
- The various interrupt
 - Timer Function can be set up between 1/4096 second and 255 minutes.
 - Alarm Function can be set to day of week, day, hour, or minute.

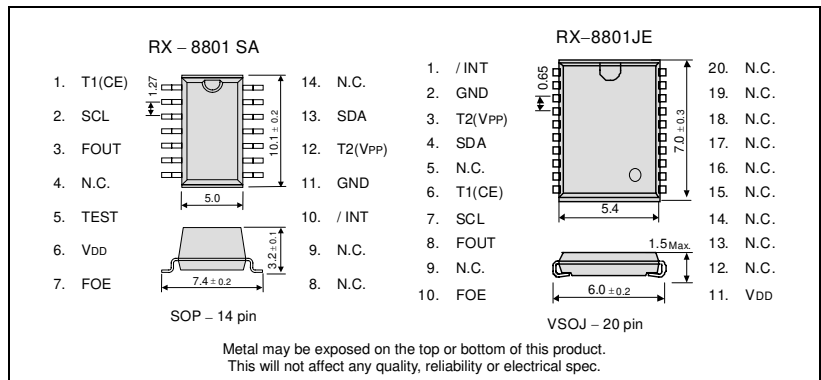
*It is possible to use it by the terminal connection as 32.768 kHz-DTCXO.

Pin Function

Signal Name	I / O	Function
T1(CE)	input	* Use by the manufacture for testing. (Do not connect externally.)
SCL	input	Serial clock input pin
FOUT	Output	The pin outputs the reference clock signal. (CMOS output)
TEST	input	* Use by the manufacture for testing. (Do not connect externally.)
VDD	-	Connected to a positive power supply
FOE	input	The input pin for the FOUT output control.
/INT	Output	Interrupt output (N-ch open drain)
GND	-	Connected to a ground
T2(VPP)	-	* Use by the manufacture for testing. (Do not connect externally.)
SDA	I / O	Data input and output pin

Terminal connection / External dimensions

(Unit:mm)



Specifications (characteristics)

* Refer to application manual for details.

■ Electrical Characteristics							
Item	Symbol	Condition	Min.	Typ.	Max.	Unit	
Interface voltage	V _{DD}	Interface voltage	1.6	3.0	5.5	V	
Temp. compensated Voltage	V _{TEM}	Temp. compensated voltage	2.2	3.0	5.5	V	
Clock voltage	V _{CLK}	-	1.6	3.0	5.5	V	
Operating temperature	T _{OPR}	-	-40	+25	+85	°C	
Stability	Δf/f	UA	Ta = 0 °C to +40 °C	±1.9 ^{*1}		× 10 ⁻⁶	
			Ta = -40 °C to +85 °C	±3.4 ^{*2}			
		UB	Ta = 0 °C to +50 °C	±3.8 ^{*3}			
			Ta = -40 °C to +85 °C	±5.0 ^{*4}			
Current consumption (1)	I _{BK1}	Backup Mode FOE = GND, /INT = V _{DD} FOUT output : OFF	V _{DD} = 5V	-	1.2	3.4	μA
Current consumption (2)	I _{BK2}		V _{DD} = 3V	-	0.8	2.1	μA

*1) Equivalent to 5 seconds of month deviation. *2) Equivalent to 9 seconds of month deviation.
 *3) Equivalent to 10 seconds of month deviation. *4) Equivalent to 13 seconds of month deviation.

■ 32.768 kHz-DTCXO Frequency temperature characteristics (Example)

